

**A** *udit*

**R** *eport*



GOVERNMENT PERFORMANCE AND RESULTS ACT GOALS:  
SURGE SEALIFT AND FORCES SUPPORTED BY  
LAND- AND SEA-BASED PRE-POSITIONING

Report No. D-2001-128

May 23, 2001

Office of the Inspector General  
Department of Defense

## Form SF298 Citation Data

<b>Report Date</b> <i>("DD MON YYYY")</i> 23May2001	<b>Report Type</b> N/A	<b>Dates Covered (from... to)</b> <i>("DD MON YYYY")</i>
<b>Title and Subtitle</b> Government Performance and Results Act Goals: Surge Sealift and Forces Supported by Land- and Sea-Based Pre-Positioning		<b>Contract or Grant Number</b>
		<b>Program Element Number</b>
<b>Authors</b>		<b>Project Number</b>
		<b>Task Number</b>
		<b>Work Unit Number</b>
<b>Performing Organization Name(s) and Address(es)</b> OAIG-AUD (ATTN: AFTS Audit Suggestions) Inspector General Department of Defense 400 Army Navy Drive (Room 801) Arlington, VA 22202-2884		<b>Performing Organization Number(s)</b> D-2001-128
<b>Sponsoring/Monitoring Agency Name(s) and Address(es)</b>		<b>Monitoring Agency Acronym</b>
		<b>Monitoring Agency Report Number(s)</b>
<b>Distribution/Availability Statement</b> Approved for public release, distribution unlimited		
<b>Supplementary Notes</b> Document has some color		
<b>Abstract</b> The Government Performance and Results Act (GPRA) of 1993, Public Law 103-62, was designed to improve Government-wide program effectiveness, Government accountability, and, ultimately, public confidence by requiring agencies to identify measurable annual performance goals, against which actual achievements can be compared. This report is one in a series of reports resulting from our audits of GPRA goals. This report discusses the FY 2000 DoD GPRA Performance Measures 1.3.2, "Surge Sealift," and 1.3.3, ".Forces Supported by Land- and Sea-Based Pre-PositioningI. (Pre-Positioned Equipment). GPRA Performance Goal 1.3, "Strategic Mobility," comprises Performance Measure 1.3.1, "Airlift Capacity;" Surge Sealift; and Pre-Positioned Equipment. The overall goal for those performance measures is to "maintain the capability to move military forces from the United States to any location in the world in response to aggression, using a combination of airlift, sealift, and pre-positioned equipment." The FY 2000 goal for Performance Measure 1.3.2 was 8.7 million square feet of capacity. The FY 2000 goal for Performance Measure 1.3.3 was seven Army heavy brigade sets, three Marine Expeditionary Forces afloat, and one partial Marine Expeditionary Force on land.		
<b>Subject Terms</b>		

<b>Document Classification</b> unclassified	<b>Classification of SF298</b> unclassified
<b>Classification of Abstract</b> unclassified	<b>Limitation of Abstract</b> unlimited
<b>Number of Pages</b> 31	

## **Additional Information and Copies**

To obtain additional copies of this audit report, visit the Inspector General, DoD, Home Page at [www.dodig.osd.mil/audit/reports](http://www.dodig.osd.mil/audit/reports) or contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932.

## **Suggestions for Audits**

To suggest ideas for or to request audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-4704

## **Defense Hotline**

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to [Hotline@dodig.osd.mil](mailto:Hotline@dodig.osd.mil); or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

## **Acronyms**

GPRA	Government Performance and Results Act
LMSR	Large, Medium-Speed, Roll-On/Roll-Off
QDR	Quadrennial Defense Review



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202

May 23, 2001

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (COMPTROLLER)  
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION

SUBJECT: Audit Report on Government Performance and Results Act Goals: Surge  
Sealift and Forces Supported by Land- and Sea-Based Pre-Positioning  
(Report No. D-2001-128)

We are providing this report for review and comment. This is one in a series of reports being issued by the Inspector General, DoD, that discusses various performance measures and indicators of the draft DoD Government Performance and Results Act Performance Report for FY 2000. We considered management comments on a draft of this report when preparing the final report.

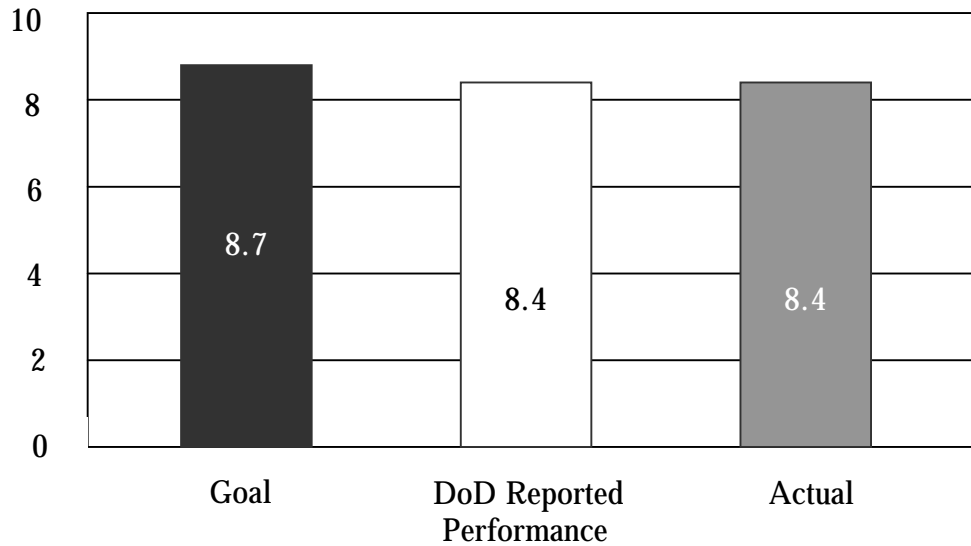
DoD Directive 7650.3 requires that all recommendations be resolved promptly. Because management had insufficient time to incorporate recommended changes into the DoD FY 2000 Government Performance and Review Act Performance Report, we revised Recommendations A.1. and B.1. We request that the Director, Program Analysis and Evaluation, provide additional comments on Recommendation A.2.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Robert M. Murrell at (703) 604-9180 (DSN 664-9180) (rmurrell@dodig.osd.mil) or Mr. Patrick J. Nix at (703) 604-9193 (DSN 664-9193) (pnix@dodig.osd.mil). See Appendix D for the report distribution. The audit team members are listed inside the back cover.

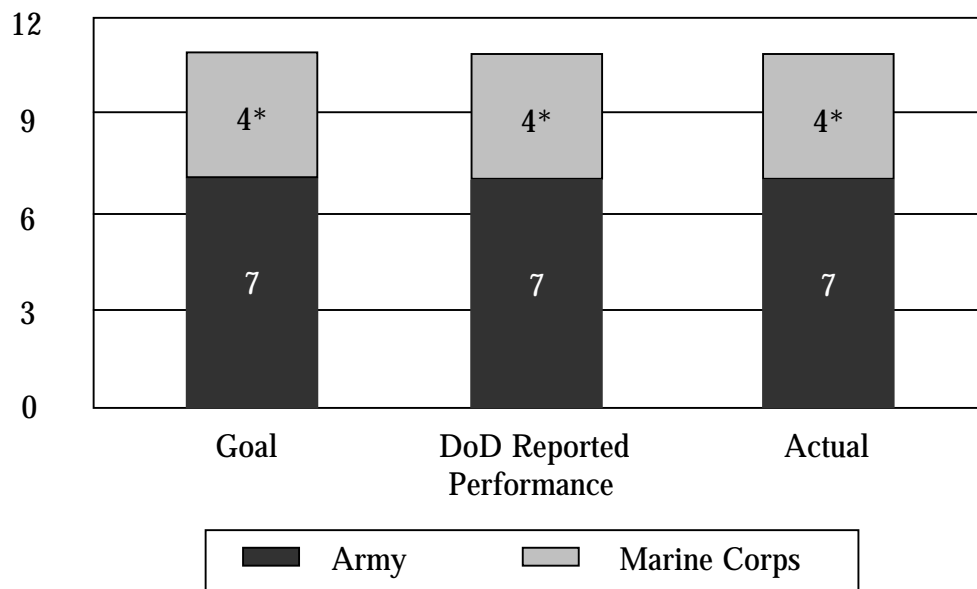
*David K. Steensma*

David K. Steensma  
Acting Assistant Inspector General  
for Auditing

**FY 2000 Government Performance and Results Act  
Surge Sealift Performance Measure  
(in million square feet)**



**FY 2000 Government Performance and Results Act  
Pre-Positioned Equipment Performance Measure  
(in number of brigades or Marine Expeditionary Forces)**



\*The draft GPRA Performance Report for FY 2000 shows "partial" for the land-based portion because material is pre-positioned only for the lead elements of a Marine Expeditionary Force.

## **Office of the Inspector General, DoD**

**Report No. D-2001-128**

(Project No. D2000LH-0143.002)

**May 23, 2001**

### **Government Performance and Results Act Goals: Surge Sealift and Forces Supported by Land- and Sea-Based Pre-Positioning**

#### **Executive Summary**

**Introduction.** The Government Performance and Results Act (GPRA) of 1993, Public Law 103-62, was designed to improve Government-wide program effectiveness, Government accountability, and, ultimately, public confidence by requiring agencies to identify measurable annual performance goals, against which actual achievements can be compared.

This report is one in a series of reports resulting from our audits of GPRA goals. This report discusses the FY 2000 DoD GPRA Performance Measures 1.3.2, "Surge Sealift," and 1.3.3, "Forces Supported by Land- and Sea-Based Pre-Positioning" (Pre-Positioned Equipment). GPRA Performance Goal 1.3, "Strategic Mobility," comprises Performance Measure 1.3.1, "Airlift Capacity;" Surge Sealift; and Pre-Positioned Equipment. The overall goal for those performance measures is to "maintain the capability to move military forces from the United States to any location in the world in response to aggression, using a combination of airlift, sealift, and pre-positioned equipment." The FY 2000 goal for Performance Measure 1.3.2 was 8.7 million square feet of capacity. The FY 2000 goal for Performance Measure 1.3.3 was seven Army heavy brigade sets, three Marine Expeditionary Forces afloat, and one partial Marine Expeditionary Force on land.

**Objectives.** The overall audit objective was to evaluate the strategic mobility goals of GPRA, as shown in the draft DoD GPRA Performance Report (the Report) for FY 2000. Specifically, for this report, we assessed the validity of the processes, data, and factors used to establish the performance measures goals related to surge sealift and pre-positioned equipment. We evaluated the methods used to accumulate and report the data collected by DoD against those goals. We also reviewed the management control program as it applied to the overall audit objective, which will be discussed in a summary report.

**Results.** DoD reported 8.4 million square feet of capacity for the performance measure on Surge Sealift. The goal of 8.7 million square feet was not met by 300,000 square feet of capacity because the delivery of a large, medium-speed, roll-on/roll-off ship was postponed until FY 2001. The Surge Sealift measure established performance goals for

the sealift capacity needed at “the outset of a crisis.” However, the usefulness of that as a tool for assessing the ability of all sealift forces can be improved for the Report. The Surge Sealift performance measure can be revised to provide more complete information on the sealift forces’ ability to provide the transport capacity necessary to military forces during the spectrum of contingencies (finding A).

DoD reported seven Army heavy brigade sets (six land-based and one afloat), three Marine Expeditionary Forces afloat, and one partial Marine Expeditionary Force on land for the performance measure on Pre-Positioned Equipment. The goal was met for Performance Measure 1.3.3. The measure established performance goals for those forces required very early in a conflict. However, the usefulness of the Pre-Positioned Equipment measure as a tool for assessing the capability of all DoD pre-positioned equipment was not clearly explained in the Report. Further, the presentation of the performance data reported against the measure provided too vague a description of the employment capability of the pre-positioned equipment sets. The Pre-Positioned Equipment performance measure can be revised to provide more complete information on the ability of DoD to quickly respond to crises worldwide by using pre-positioned equipment (finding B).

**Summary of Recommendations.** We recommend that the Director, Program Analysis and Evaluation, more clearly explain the Surge Sealift performance measure in future GPRA publications in the context of supporting the entire spectrum of operations and adopt a more informative presentation scheme for portraying the mix of cargo carrying capacity DoD has available in ship inventory for meeting sealift requirements.

We also recommend that the Director, Program Analysis and Evaluation, more clearly explain that the usefulness of the Pre-Positioned Equipment performance in future GPRA publications in the context of 12 DoD pre-positioning programs and adopt a more informative presentation scheme for portraying the fill rate of the pre-positioned equipment sets and the serviceability of the equipment in the sets.

**Management Comments.** The Director, Program Analysis and Evaluation, agreed that the full utility of sealift forces in responding to crises needed to be more fully explained. The Director stated he would ensure future GPRA publications include an adequate description of the performance measure, should it be retained by the ongoing defense review as an executive-level management tool. The Director also agreed that segregating sealift requirements into twenty-foot equivalent units for containerships and square feet for other ship types was a better way to represent the full range of capacity available for defense missions; however, he stated the current surge sealift fleet consisted exclusively of roll-on/roll-off ships, barge carriers, and break-bulk ships. Therefore, the Director stated, it was appropriate to use square footage as the capacity measure unless the measure was broadened in the future.

The Director agreed the full utility of pre-positioned forces in responding to crises needed to be more fully explained. The Director stated he would ensure that future GPRA publications include an adequate description of the performance measure, should it be retained by the ongoing defense review as an executive-level management tool. The Director also stated that discussions of readiness problems and their likely effects



are classified. In lieu of adding such a discussion to the Report, the Director stated he would add language to point readers to another information source for more detailed information on the employment capability of pre-positioned sets. The Director agreed to correctly represent the Marines Corps pre-positioned sets in future GPRA publications. See the Finding section for a discussion of management comments and the Management Comments section for the complete text of the comments.

**Audit Response.** The Director, Program Analysis and Evaluation, comments are partially responsive. Some of the roll-on/roll-off ships and barge carriers contained in the surge sealift fleet possess capacity that is quantified in twenty-foot equivalent units (containers) and converted into square feet for inclusion in GPRA publications. We request the Director, Program Analysis and Evaluation, provide additional comments on segregating sealift requirements by ship type in future GPRA publications by June 25, 2001.

# Table of Contents

---

<b>Executive Summary</b>	i
<b>Introduction</b>	
Background	1
Objectives	2
<b>Findings</b>	
A. Surge Sealift Performance Measure	3
B. Pre-Positioned Equipment Performance Measure	6
<b>Appendixes</b>	
A. Audit Process	
Scope and Methodology	11
Prior Coverage	12
B. Strategic Sealift Programs	13
C. Pre-Positioning Programs	15
D. Report Distribution	18
<b>Management Comments</b>	
Director, Program Analysis and Evaluation	21

---

## Background

This report is one in a series of reports resulting from our audits of the Government Performance and Results Act (GPRA) goals. This report discusses the FY 2000 DoD GPRA Performance Measure 1.3.2, “Surge Sealift,” and Performance Measure 1.3.3, “Forces Supported by Land- and Sea-Based Pre-Positioning” (Pre-Positioned Equipment). Performance Goal 1.3, “Strategic Mobility,” comprises Performance Measure 1.3.1, “Airlift Capacity”; Surge Sealift; and Pre-Positioned Equipment.

**The Government Performance and Results Act of 1993 (Public Law 103-62).** GPRA was designed to improve Government-wide program effectiveness, Government accountability, and, ultimately, public confidence by requiring agencies to identify measurable annual performance goals, against which actual achievements can be compared. GPRA requires Federal agencies to prepare strategic plans, annual performance plans, and program performance reports covering the program activities set out in their budgets.

**Quadrennial Defense Review.** The May 1997 Report of the Quadrennial Defense Review (QDR) describes the results of a definitive, overarching program evaluation undertaken by DoD. The QDR provides a blueprint for a balanced and affordable defense program, based on an examination of the Nation’s defense needs from 1997 to 2015; the potential threats the Nation might face; and the strategy, force structure, readiness, infrastructure, and modernization programs needed to cope with them. The May 1997 QDR is the DoD strategic plan. The strategic plan will remain in effect until revised by the next QDR, in 2001, as mandated by Section 402 of the National Defense Authorization Act for FY 2000 (Public Law 106-65). DoD has established two corporate level goals that form the basis for using GPRA as a management tool, and they serve as strategic goals for DoD.

**GPRA Goals and Measures.** DoD prepared a draft DoD GPRA Performance Report (the Report) for FY 2000, dated November 27, 2000, that includes a combined performance plan for FY 2002 and performance report for FY 2000. The Office of the Director, Program Analysis and Evaluation, obtains data and prepares the Report.

Annual performance goals establish a measurable path to incremental achievement of the corporate goals. Performance goals are supported and evaluated by quantifiable output, which is assessed using performance measures and indicators. Performance Goal 1.3 is one of three subordinate goals of Corporate Level Goal 1: “Shape the international security environment and respond to the full spectrum of crises by providing appropriately sized, positioned, and mobile forces.” This report discusses Performance Measures 1.3.2 and 1.3.3, which are two of the three measures used to assess Performance Goal 1.3: “Maintain the capability to move military forces from the United States to any location in the world in response to aggression, using a combination of airlift, sealift, and pre-positioned equipment.”

---

**GPRA Surge Sealift Performance Measure Goal.** The overall goal established by DoD for Performance Measure 1.3.2 was 10 million square feet of surge sealift capacity, which the Report states will not be reached until FY 2003. The overall goal was established by the DoD “1995 Mobility Requirements Study Bottom-Up Review Update.” The FY 2000 goal for surge sealift capacity was 8.7 million square feet. The goal for Performance Measure 1.3.2 was not met by 300,000 square feet of capacity, because the delivery of a large, medium-speed, roll-on/roll-off (LMSR) ship was postponed until FY 2001. The Report states that square footage serves as an aggregate measure of ship capacity. See Appendix B for a description of the types of ships that constitute strategic sealift.

**GPRA Pre-Positioned Equipment Performance Measure Goal.** The existing measure established performance objectives only for those forces required very early in a conflict to halt an enemy’s advance. The overall FY 2001 goal for pre-positioned equipment is two Army heavy brigade sets afloat and six heavy brigade sets on land, three Marine Expeditionary Forces afloat, and one partial Marine Expeditionary Force on land. The FY 2000 goal was one Army heavy brigade set afloat and six heavy brigade sets on land, three Marine Expeditionary Forces afloat, and one partial Marine Expeditionary Force on land. The FY 2000 goal was met. See Appendix C for details on specific pre-positioning programs established within DoD.

## Objectives

The overall objective of the audit was to evaluate the strategic mobility goals of GPRA, as shown in the Report. Specifically, for this report, we assessed the validity of the processes, data, and factors used to establish the performance measure goals related to surge sealift and pre-positioned equipment. We evaluated the methods used to accumulate and report the data collected by DoD against those goals. We also reviewed the management control program as it applied to the overall audit objective, which will be discussed in a summary report. See Appendix A for a discussion of the audit scope and methodology and prior coverage related to the audit objectives.

---

## **A. Surge Sealift Performance Measure**

The Surge Sealift measure established performance goals for the sealift capacity needed at “the outset of a crisis.” However, the usefulness of that as a tool for assessing the ability of all sealift forces can be improved for the Report. The usefulness of the measure was not clear because DoD did not adequately describe surge sealift in the context of strategic sealift or select a unit of measurement that depicted existing sealift capacity in a clear and meaningful manner. The Surge Sealift performance measure can be revised to provide more complete information on the sealift forces’ ability to provide the transport capacity necessary to respond to the spectrum of contingencies.

## **Quadrennial Defense Review**

The QDR recognizes that strategic mobility forces must be able to respond across the entire spectrum of operations. The QDR examined “mobility requirements across a continuum of planning scenarios, from smaller-scale contingency operations to major theater wars and single-theater conflicts against notional regional great power adversaries.” The QDR evaluated the extent to which our mobility forces could meet intertheater lift needs in the decades ahead. In each case, DoD measured the ability of its long-range investment program for strategic mobility to support potential deployment requirements. The QDR reaffirms DoD baseline requirements for intertheater mobility, as outlined in the 1995 Mobility Requirement Study Bottom-Up Review Update, and establishes objectives for guiding DoD long-range planning for strategic mobility forces. The study established 10 million square feet and 4.3 million square feet as baseline requirements for surge and pre-positioning sealift capacity, respectively.

## **Strategic Sealift**

Strategic sealift, one of the elements of the strategic mobility triad, helps provide the capability to deploy and sustain military forces worldwide when necessary in support of national contingencies or emergencies. Sealift is used to deliver heavy combat units and their support equipment as well as vital sustainment for deployed forces. To meet those requirements, sealift forces are employed in three phases of strategic sea transportation: pre-positioning, surge, and sustainment.

---

## **Usefulness of the Performance Measure**

DoD established the Surge Sealift measure for assessing the sealift forces' ability to provide the transport capacity necessary to respond to the spectrum of worldwide crises and to serve as a benchmark for the sealift portion of Performance Goal 1.3, Strategic Mobility. However, the usefulness of the Surge Sealift measure as a tool for assessing the ability of all sealift forces was not clearly explained in the Report. The measure established performance goals for the sealift capacity needed at "the outset of a crisis." Although the Report states the measure does not set goals for the sealift forces used for pre-positioning purposes, it implies that the capacity available from the pre-positioning sealift forces is assessed under the Pre-Positioned Equipment performance measure. Further, the discussion of the measure does not explicitly state that the capacity needed to fulfill DoD sustainment requirements is not addressed by the Surge Sealift measure.

## **Presentation of Available Sealift Capacity**

The sealift capacity identified in the Report as available for supporting U.S. forces during national contingencies could be presented in a more clear and meaningful manner. DoD identified square footage as the aggregate measure of sealift capacity, which it calculated by summing the square footage of the deck plans for all ships currently in the DoD inventory. For example, the Report stated that for container ships and breakbulk ships the standard measures (number of containers or volumetric capacity) were converted to square footage. However, square footage is not in all cases the best unit of measurement for determining and depicting a ship's available capacity. The most appropriate unit of measurement for determining and depicting a ship's capacity is dependent on the type of cargo that the ship is designed to transport. DoD should develop a more informative presentation scheme to depict the capacity available to fulfill its various types of cargo requirements.

## **Conclusion**

The Surge Sealift metric is objective, quantifiable, and measurable. However, it measures only the sealift forces' ability to provide capacity required at the outset of a crisis and not the capacity required to deploy and sustain U.S. forces in response to the spectrum of military operations. Further, the use of square footage as the aggregate measure for depicting sealift capacity does not provide a clear picture of existing sealift capacity.

---

## Recommendations, Management Comments, and Audit Response

**Revised Recommendation.** We revised draft Recommendation A.1. because there was insufficient time for management to incorporate the recommended changes into the DoD FY 2000 GPRA Performance Report before its publication.

**A. We recommend that the Director, Program Analysis and Evaluation:**

**1. More clearly explain the “Surge Sealift” performance measure in future DoD Government Performance and Results Act Performance Reports in the context of providing the transport capacity necessary to support the entire spectrum of operations.**

**Management Comments.** The Director, Program Analysis and Evaluation, concurred, stating that the full utility of sealift forces to respond to crises of varied size and scope needed to be more fully explained. The Director stated he would review the Report’s text and the discussion of pre-positioned forces in the Conventional Forces chapter of the Annual Report to the President and Congress and ensure that they provided an adequate description of the measure. The Director also stated he would incorporate changes in future GPRA publications, provided the ongoing defense review recommended retaining the performance measure as an executive-level management tool.

**2. Adopt a more informative presentation scheme for portraying the mix of cargo carrying capacity DoD has available in inventory for meeting sealift requirements.**

**Management Comments.** The Director, Program Analysis and Evaluation, partially concurred. The Director agreed that segregating the sealift requirements into twenty-foot equivalent units for containerships and square feet for other ship types was a better way to represent the full range of capacity available for defense missions; however, he stated the current surge sealift fleet consisted exclusively of roll-on/roll-off ships, barge carriers, and break-bulk ships. Therefore, the Director stated it, was appropriate to use square footage as the capacity measure unless the measure was broadened in the future.

**Audit Response.** The Director, Program Analysis and Evaluation, comments are partially responsive. Some of the roll-on/roll-off ships and barge carriers contained in the surge sealift fleet possess capacity that was quantified in twenty-foot equivalent units (containers) and converted into square feet for inclusion in the GPRA publications. DoD did not use that approach for evaluating and representing sealift capacity in the recently completed Mobility Requirements Study 2005. We request the Director provide additional comments on portraying the mix of the surge sealift fleet’s cargo carrying capacity in future GPRA publications.

---

## **B. Pre-Positioned Equipment Performance Measure**

The Pre-Positioned Equipment measure established performance goals for forces required very early in a conflict. However, the usefulness of the Pre-Positioned Equipment measure as a tool for assessing the capability of all DoD pre-positioned equipment was not clearly explained in the Report. Further, the presentation of the performance data reported against the measure provided too vague a description of the employment capability of the pre-positioned equipment sets. As a result, the Pre-Positioned Equipment performance measure provided incomplete information on the DoD's ability to quickly respond to crises worldwide by using pre-positioned equipment.

### **Quadrennial Defense Review**

The QDR cites a need for six Army land-based heavy brigade sets of pre-positioned equipment (three in Europe, one in Korea, and two in Southwest Asia) plus a Marine brigade set in Norway. In addition, the QDR cites a need for significant stocks of pre-positioned equipment afloat, including three Marine Corps squadrons and one heavy brigade set of Army equipment. The QDR also mentions the need for selected munitions for the Air Force, but that requirement was not considered in the Report as a long-term objective for pre-positioned equipment.

### **Pre-Positioned Equipment**

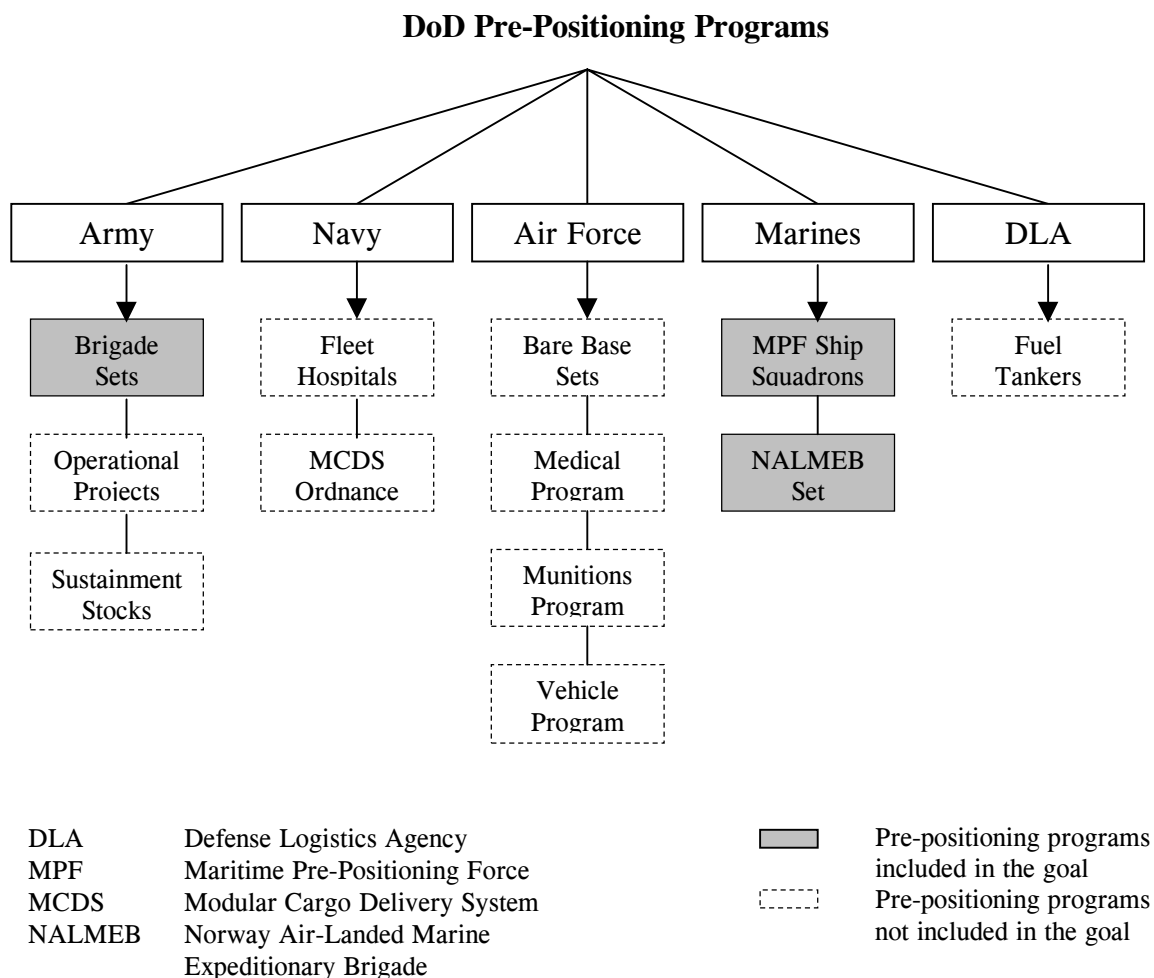
Pre-positioned military equipment and supplies are used to help provide the Nation with the ability to quickly respond to crises worldwide. The pre-positioning of military equipment and supplies near regions of potential conflict reduces the time required to respond to crises. As the United States decreased the number of troops stationed overseas, pre-positioning military equipment and supplies became more important to maintaining our response capability.

With materiel stored afloat or on land at overseas locations, only troops and a relatively smaller amount of equipment need to be airlifted to a theater early in a crisis. As a result, DoD can field heavily equipped, combat-ready forces in days, rather than the weeks it would take to airlift or sealift all necessary equipment and supplies from the United States.

**DoD Pre-Positioning Programs.** The Services and the Defense Logistics Agency established 12 programs that pre-position equipment and supplies on land and afloat near regions of potential conflict. Land-based pre-positioning programs are maintained in Europe, the Pacific region, and Southwest Asia. Those programs are complemented by sea-based pre-positioning, which provides the flexibility to move equipment within and between theaters of operation. The



following figure shows the 12 pre-positioning programs established by DoD. The three highlighted programs are included in the goal for the Pre-Positioned Equipment measure.



## Usefulness of the Performance Measure

DoD established the Pre-Positioned Equipment measure to assess its ability to quickly respond to crises worldwide because of the pre-positioning of military equipment and supplies near regions of potential conflict and to serve as a benchmark for the Pre-Positioned Equipment portion of Performance Goal 1.3, “Strategic Mobility.” However, the usefulness of the Pre-Positioned Equipment measure as a tool for assessing the capability of all pre-positioned equipment was not clearly explained in the Report. The Report does not inform the reader that the measure established performance objectives for only 3 of the 12 DoD pre-positioning programs. Those three programs cover the equipment needed by forces very early in a conflict and consist of only the unit equipment and supplies pre-positioned by the Army and the Marine Corps. The Report notes that additional programs, not covered by the performance measure, provide base, fuel, and medical support. However, a large part of the Report discussion

---

of FY 2000 performance results is devoted to the readiness of Air Force Bare Base Sets, which are not included in the performance measure. The Report does not adequately describe how those and other conclusions made in the Report about the capability of the pre-positioned equipment not covered by the measure were derived from the data collected.

## Presentation of the Performance Data

The presentation of the performance data reported against the Pre-Positioned Equipment measure's goals provided too vague a description of the employment capability of the pre-positioned equipment sets. The performance data reported against the measure show the number of equipment sets pre-positioned in whole numbers and make only vague references to the fill rate of the sets and the serviceability of the equipment in the sets for some of the reported pre-positioned equipment. For example, the Report states that "during FY 2000 the three brigade sets of Army material prepositioned in Europe were not stocked or maintained to the same standards as Army material prepositioned in Southwest Asia, Korea, or afloat." That reference provides a too ambiguous and incomplete picture of the employment capability of the equipment sets. If time is lost obtaining, repairing, or replacing damaged or depleted equipment before deployment, mission accomplishment could be put at risk. A more informative presentation scheme is needed. Table 1 provides an example of a way to more clearly depict the readiness status of the equipment for the brigade sets reported to be pre-positioned by the Army by showing the percentages of equipment on hand and the serviceability of that equipment. Table 1 shows that two of the seven sets contained less than 79 percent of their equipment. Further, Table 1 shows that one of the seven brigade sets had equipment on hand that was between 60 percent to 89 percent serviceable, while the equipment on hand for two others was less than 59 percent serviceable.

**Table 1. Status of Army Pre-Positioned Heavy Brigade Sets**  
(as of the end of FY 2000)

	<u>Percent Fill Rate</u>	<u>Percent Serviceability</u>
Afloat	80-89	90-100
Europe 1	> 79	> 59
Europe 2	80-89	60-89
Europe 3	> 79	> 59
Korea	90-100	90-100
Kuwait	90-100	90-100
Oatar	80-89	90-100

---

## Marine Corps Unit Designators

Due to a FY 1999 change within the Office of the Commandant of the Marine Corps, modifications were made to the terminology used to describe Marine Expeditionary Forces-Forward (deployed), which DoD shortened to Marine Expeditionary Forces in the Report. The forward-deployed forces are now referred to as Marine Expeditionary Brigades. As a result, the Report should be modified as shown in Table 2.

<b>Table 2. Number of Marine Expeditionary Brigades (MEBs)</b> (as of the end of FY 2000)		
	<u>FY 2000 Goal</u>	<u>FY 2001 Goal</u>
Land-based	1*	1*
Afloat	3	3
*Material is pre-positioned in MEB-sized units.		

## Conclusion

The Pre-Positioned Equipment metric is objective, quantifiable, and measurable. However, it measures only 3 of the 12 DoD pre-positioning programs. Further, the presentation of the performance data reported against the measure provided too vague a description of the employment capability of the pre-positioned equipment sets. Therefore, the Pre-Positioned Equipment performance measure provided incomplete information on the Nation's ability to quickly respond to crises worldwide by using pre-positioned equipment.

## Recommendations, Management Comments, and Audit Response

**Revised Recommendation.** We revised draft Recommendation B.1. because there was insufficient time for management to incorporate the recommended changes into the DoD FY 2000 GPRA Performance Report before its publication.

**B. We recommend that the Director, Program Analysis and Evaluation:**

**1. More clearly explain the usefulness of the "Forces Supported by Land-and Sea-Based Pre-Positioning" performance measure in future DoD Government Performance and Results Act Performance Reports in the context of 12 DoD pre-positioning programs.**

---

**Management Comments.** The Director, Program Analysis and Evaluation, concurred, stating that the full utility of pre-positioned forces to respond to crises of varied size and scope needed to be more fully explained. The Director stated he would review the Report's text and the discussion of pre-positioned forces in the Conventional Forces chapter of the Annual Report to the President and Congress and ensure that they provided an adequate description of the measure. The Director also stated he would incorporate changes in future GPRA publications, provided the ongoing defense review recommended retaining the performance measure as an executive-level management tool.

**2. Adopt a more informative presentation scheme, similar to Table 1, for portraying the fill rate of the sets and the serviceability of the equipment in the sets of the reported pre-positioned equipment.**

**Management Comments.** The Director, Program Analysis and Evaluation, nonconcurred, stating that discussions of readiness problems and their likely effects are classified. The Director stated DoD already provided detailed information on the employment capability of the pre-positioned sets as a part of its classified Quarterly Readiness Report to Congress. To overcome the vagueness of the unclassified summary contained in the Report, the Director stated he would add language to future GPRA publications to clearly point readers to the Quarterly Readiness Report to Congress for more detailed information on the employment capability of the pre-positioned sets.

**Audit Response.** The proposed alternative actions meet the intent of the recommendation. Therefore, no additional comments are needed.

**3. Change reference from Marine Expeditionary Forces to Marine Expeditionary Brigades.**

**Management Comments.** The Director, Program Analysis and Evaluation, concurred and stated he will incorporate the suggested change into future GPRA publications, provided the ongoing defense review determines the performance measure should be retained as an executive-level management tool.

---

## Appendix A. Audit Process

### Scope and Methodology

We validated the process for accumulating and reporting the actual data collected by DoD against the FY 2000 goals for Performance Measures 1.3.2 and 1.3.3. We performed the audit at the Department of Transportation Maritime Administration; the Military Departments; the Office of the Director, Program Analysis and Evaluation; the U.S. Transportation Command (including the Military Sealift Command and the Military Traffic Management Command-Transportation Engineering Agency); and other offices responsible for sealift capacity and pre-positioned equipment. We reviewed the Report; the GPRA of 1993; Joint Pub 4-01.2, "Joint Tactics, Techniques, and Procedures for Sealift Support to Joint Operations," October 9, 1996; the "1995 DoD Mobility Requirements Study Bottom-Up Review Update"; the May 1997 Report of the QDR; the Voluntary Intermodal Sealift Agreement program; and other related DoD policies and directives. We also obtained documentation, drawings, and measurements to verify ship capacity, equipment on hand, and equipment serviceability reported for FY 2000.

**Use of Computer-Processed Data.** We did not evaluate the general and application controls of the Integrated Computerized Deployment System that processes ship capacity data, although we relied on data produced by that system to conduct the audit. We did not evaluate the controls because we obtained other documentation, drawings, and measurements that supported the computer-processed data. Not evaluating the controls did not affect the results of the audit.

**Audit Type, Dates, and Standards.** We performed this program audit from February 2001 through March 2001 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

**Contacts During the Audit.** We visited or contacted individuals and organizations within DoD and other Government agencies. Further details are available on request.

**Management Control Program Review.** Our review of management controls over GPRA performance measure goals will be discussed in a summary report upon completion of the current reviews.

---

## Prior Coverage

The General Accounting Office has conducted multiple reviews related to GPRA. This report is one in a series on the Inspector General, DoD, current reviews of GPRA performance measures and indicators. Unrestricted General Accounting Office reports can be accessed over the Internet at <http://www.gao.gov>. Unrestricted Inspector General, DoD, reports can be accessed at <http://www.dodig.osd.mil/audit/reports>.

## Inspector General, DoD

Inspector General, DoD, Report No. D-2001-080, "Government Performance and Results Act Goals: Disposal of Excess Real Property," March 15, 2001

Inspector General, DoD, Report No. D-2001-045, "Government Performance and Results Act Goals: Tank Miles," February 7, 2001

Inspector General, DoD, Report No. D-2001-033, "Government Performance and Results Act Goals: Unfunded Depot Maintenance Requirements," January 12, 2001

Inspector General, DoD, Report No. D-2001-021, "Government Performance and Results Act Reporting on Defense Working Capital Funds Net Operating Results," January 10, 2001

Inspector General, DoD, Report No. D-2000-136, "Reporting of Performance Measures in the DoD Agency-Wide Financial Statements," May 31, 2000

---

## Appendix B. Strategic Sealift Programs

Sealift forces are employed in the three phases of strategic sealift: pre-positioning, surge, and sustainment.

**Pre-Positioning.** The Afloat Pre-Positioning Force is divided into three separate elements: the Combat Pre-Positioning Force; the Logistics Pre-Positioning Force; and the Maritime Pre-Positioning Force.



**Large, Medium-Speed, Roll-On/Roll-Off Ship**

- The Combat Pre-Positioning Force consists of 14 ships. The force includes one auxiliary crane ship, two combination roll-on/roll-off container ships, one float-on/float-off ship, six LMSR ships, one lift-on/lift-off ship, and three lighter aboard ships. The ships, combined, provide 2.9 million square feet of military useful capacity.

- The Logistics Pre-Positioning Force consists of nine ships. The force includes two aviation logistics support ships (in 5-day reduced operating status), three combination roll-on/roll-off container ships, one modular cargo delivery system ship, and three tankers. The ships, combined, provide 1 million square feet of military useful capacity and 650,000 barrels of fuel.



**Converted Roll-On/Roll-Off Ship**

- The Maritime Pre-Positioning Force consists of 14 ships in 3 squadrons. The ships are all specifically constructed or converted roll-on/roll-off ships, and, combined, provide 2.1 million square feet of military useful capacity.

**Surge.** The Surge Fleet is divided into the organic fleet, operated by the Military Sealift Command, and the Ready Reserve Force.

- The Military Sealift Command operates two types of sealift ships for DoD: fast sealift ships and LMSR ships. Eight fast sealift ships are maintained in a 4-day reduced operating status. Five LMSR ships were also maintained in FY 2000. The total military useful capacity of those 13 ships was 2.5 million square feet.



**Breakbulk Ship**

- The Ready Reserve Force consisted of 75 ships as of the end of FY 2000. The force consists of 9 auxiliary crane ships, 28 breakbulk ships, 4 lighter aboard ships, 31 roll-on/roll-off ships, and 3 sea barges. The total military useful capacity of the Ready Reserve Force was 5.9 million square feet.

**Sustainment.** The sustainment phase of strategic sealift refers to shipping provided by the U.S. Merchant Fleet. That fleet consists of 106 ships: 4 breakbulk ships, 5 bulk carriers, 79 containerships, 1 integrated tug barge, 4 lighter aboard ships, 4 roll-on/roll-off ships, and 9 vehicles carriers. The 106 ships, combined, provide an estimated 18.8 million square feet of military useful capacity. In addition, commercial ships provided by the Voluntary Intermodal Sealift Agreement program are available to meet surge sealift requirements, should additional capacity be needed.



---

## Appendix C. Pre-Positioning Programs

The following are the pre-positioning programs containing equipment and supplies strategically placed at overseas locations. Equipment and supplies are pre-positioned on land and afloat by the Services and the Defense Logistics Agency.

### Army

**Brigade Sets.** As of 2000, the Army had one heavy brigade set afloat pre-positioned on six LMSR ships and planned to pre-position a second heavy brigade set afloat during FY 2001. The Army also had six heavy brigade sets pre-positioned on land: three in Europe, one in Korea, one in Kuwait, and one in Qatar. The sets consist of major unit equipment (such as artillery pieces, Bradley fighting vehicles, tanks, and other tracked and wheeled vehicles) and sustainment supplies to support about 3,000 to 5,000 soldiers.

**Operational Projects.** The Army pre-positions stocks afloat and on land for special missions. The stocks include a range of support equipment and supplies, from bridges and fuel pipelines to chemical gear and clothing. Of 15 Operational Projects, 10 had all or a portion of their stocks pre-positioned on ships or at overseas locations. Some of the Operational Projects are carried on ships in the Combat Pre-Positioning Force, and stocks for additional projects are strategically placed on land in Europe, Japan, Korea, and Southwest Asia.

**Sustainment Stocks.** The Army's Sustainment Stocks Program consists of major end-items to be used as replacements (such as radios, tanks and other tracked vehicles, and other weapons) and war reserve secondary items (such as clothing and textiles, food, medical supplies, and repair parts). Sustainment stocks are placed on ships in the Combat Pre-Positioning Force and additional stocks are strategically placed on land in Japan, Korea, and Qatar.

### Navy

**Fleet Hospitals.** The Navy's Fleet Hospital Program consists of seven land-based fleet hospitals. Each is a 500-bed modular hospital that includes rapidly erectable medical and surgical facilities. The hospitals are pre-positioned in Guam, Japan, Korea, and Norway. The Navy transferred its afloat fleet hospital to the first Maritime Pre-Positioning Force-Enhanced Ship, which joined squadron one of the Maritime Pre-Positioning Force in FY 2000. Two additional land-based fleet hospitals will be transferred to the Maritime Pre-Positioning Force by the end of FY 2002.

**Modular Cargo Delivery System.** The Navy pre-positions a munitions vessel afloat, outfitted with a modular cargo delivery system. The vessel carries

---

munitions of more than 2 million pounds of net explosive weight and other Navy ordnance and equipment. It also operates as a shuttle replenishment ship for naval battle groups.

## Air Force

**Bare Base Sets.** Air Force Bare Base Sets provide airfield, billeting, and industrial capability to support more than 68,000 personnel and 822 aircraft at 15 austere locations. Complete bases are built from the ground up using the equipment sets. Bare Base Sets include Housekeeping Sets for billeting, hygiene, and messing; Flightline Sets for aircraft hangars, barriers, and runway lighting; and Industrial Operations Sets for back shops, warehouses, and other support facilities. Bare Base Sets are pre-positioned in Europe, Korea, and Southwest Asia.

**Medical Program.** The Air Force pre-positions medical equipment and supplies as Air Transportable Hospitals to provide medical services for deployed forces through the entire spectrum of contingencies (from humanitarian operations to major theater war). There were Air Transportable Hospitals pre-positioned in Europe, Southeast Asia, and Southwest Asia at the end of FY 1999, but the Air Force is in an ongoing transition phase. Air Transportable Hospitals are being converted to Expeditionary Medical Support/Air Force Theater Hospitals, which begin with the basic force package and progress in increments as required to a fully developed stage where significant specialty care capability is available.

**Munitions Program.** The Air Force has significant stocks of munitions pre-positioned afloat and on land. Three ships in the Logistics Pre-Positioning Force carry munitions. The ships are a combination of roll-on/roll-off and container ships. The land-based munitions are pre-positioned in Korea and Southwest Asia.

**Vehicle Program.** The Vehicle Program is critical to the Air Force's ability to generate combat sorties and sustain flight operations. The vehicles include general-purpose vehicles, such as buses and trucks, and special-purpose vehicles, such as firefighting and materiel-handling equipment. The Air Force has pre-positioned vehicles in the European, Pacific, and Persian Gulf regions.

## Marines

**Maritime Pre-Positioning Force.** The Maritime Pre-Positioning Force consists of 14 ships organized into 3 squadrons. Each squadron is loaded with equipment and sustainment supplies to maintain more than 17,000 Marine Air-Ground Task Force personnel for up to 30 days. The ships carry much of what the Marines need for initial operations, such as ammunition, amphibious assault vehicles, armored and tracked vehicles, artillery, fuel, landing craft, rations, and repair parts, as well as fixed- and rotary-wing air combat equipment.

---

**Norway Air-Landed Marine Expeditionary Brigade Set.** This Marine brigade set is pre-positioned on land and consists of equipment and sustainment supplies to support more than 13,000 Marine Air-Ground Task Force personnel for up to 30 days. The stocks are kept in underground, climate-controlled warehouses in Norway. Specifically included are mission-essential items that are heavy weight or high volume, suited for extended storage, and not available through Wartime Host-Nation Support.

## **Defense Logistics Agency**

**Tankers.** The Defense Logistics Agency pre-positions three tankers afloat. Two tankers are equipped with off-shore petroleum discharge systems, and the third tanker is capable of underway replenishment. The three tankers can carry more than 650,000 barrels of fuel to support deployed forces afloat and ashore.

---

## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)  
Director, Program Analysis and Evaluation  
Under Secretary of Defense for Personnel and Readiness

### **Joint Staff**

Directorate for Operations (J-3)  
Directorate for Logistics (J-4)

### **Department of the Army**

Deputy Chief of Staff for Operations and Plans  
Deputy Chief of Staff for Logistics  
Auditor General, Department of the Army

### **Department of the Navy**

Deputy Chief of Naval Operations (Plans, Policy, and Operations)  
Deputy Chief of Naval Operations (Logistics)  
Naval Inspector General  
Auditor General, Department of the Navy

### **Marine Corps**

Commandant of the Marine Corps  
Deputy Chief of Staff for Plans, Policies and Operations  
Inspector General, Marine Corps

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Deputy Chief of Staff Air and Space Operations  
Deputy Chief of Staff Installations and Logistics  
Auditor General, Department of the Air Force

---

## **Unified Commands**

Commander in Chief, U.S. European Command  
Commander in Chief, U.S. Pacific Command  
Commander in Chief, U.S. Southern Command  
Commander in Chief, U.S. Central Command  
Commander in Chief, U.S. Transportation Command  
    Commander, Military Traffic Management Command  
    Commander, Military Sealift Command

## **Other Defense Organizations**

Director, Defense Logistics Agency

## **Non-Defense Federal Organization**

Office of Management and Budget  
Director, Department of Transportation Maritime Administration

## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform  
House Subcommittee on Technology and Procurement Policy, Committee on Government Reform



# Director, Program Analysis and Evaluation Comments

Final Report  
Reference



PROGRAM ANALYSIS  
AND EVALUATION

OFFICE OF THE SECRETARY OF DEFENSE  
1800 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1800

May 9, 2001



MEMORANDUM FOR DIRECTOR, READINESS AND LOGISTICS SUPPORT  
DIRECTORATE, OFFICE OF THE DEPARTMENT OF DEFENSE  
(DoD) INSPECTOR GENERAL

SUBJECT: Audit Report on FY 2000 Government Performance and Results Act (GPRA) Surge  
Sealift and Prepositioning Goals (Project Number D2000LH-0413.002)

At your request, my office has reviewed the draft audit report on GRPA sealift and prepositioning goals, dated April 11, 2001. We concur with most of the audit's recommendations on improving data presentations for the mobility metrics. With the minor exceptions noted below, we will incorporate your suggested changes in future GPRA publications, provided the results of the ongoing defense review suggest these performance measures should be retained as executive-level management tools.

One of the shared goals of the Department of Defense and the GPRA legislation is transparency in government. Therefore, we agree that the full utility of sealift and prepositioning in responding to crises of varied size and scope should be explained in more detail. We will review the text accompanying the GPRA metrics, as well as the discussion in the Conventional Forces chapter of the *Annual Report to the President and Congress*, to ensure that, in combination, they provide an adequate description.

With regard to equipment prepositioning, the Department already provides detailed information on the readiness of individual prepositioning sets as part of the classified *Quarterly Readiness Report to Congress* (QRRC). A classified discussion of this subject is necessary both to report readiness problems and to explain their likely effects. In both the FY 1999 and FY 2000 GPRA reports, the discussion of strategic mobility under Performance Goal 1.3 included an unclassified summary of concerns raised in the QRRC. In line with your suggestion, we will ensure that future GPRA plans and reports note explicitly, under measure 1.3.3, that the readiness status of prepositioned sets is reported in the QRRC.

Finally, we agree that segregating the sealift requirement into twenty-foot equivalent units (TEUs) for containerships and square feet for roll-on/roll-off (RO/RO) and other dry-cargo ships is a better way to represent the full range of sealift capacity available for defense missions. In fact, the recently completed *Mobility Requirements Study 2005* (MRS-05) evaluated ship capacity using those units of measure. However, Performance Measure 1.3.2 is structured to report only on that increment of sealift singled out for enhancement by the 1997 Quadrennial Defense Review—surge sealift. Currently, the surge sealift fleet consists exclusively of RO/ROs, barge carriers, and break-bulk ships. Therefore, it is appropriate to use square footage as the capacity measure. If metric 1.3.2 were broadened in the future to include sea-based prepositioning and sustainment shipping, the results would be reported using the appropriate capacity measure for each type of ship.



Revised  
Recommendation A.1.  
and Recommendation  
B.1.

---

Please note that beyond the specific enhancements proposed in the audit, the measures on sealift and prepositioning may also be subject to revision based on the results of MRS-05.

We acknowledge the hard work and effort by your staff in carrying out this review, and appreciate the opportunity to comment on the report.

A handwritten signature in cursive script that reads "Barry D. Watts".

Barry D. Watts  
Director  
Program Analysis and Evaluation



## **Audit Team Members**

The Readiness and Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector General, DoD, who contributed to the report are listed below.

Shelton R. Young  
Robert M. Murrell  
Patrick J. Nix  
Diane M. Alvin  
Melinda M. Oleksa